

Claims

1. In an electronic device that accepts graphic entries and includes a screen display, a method for programming of said device, including the steps of:

5 inputting at least one object on said screen display;

 using an input device to draw at least one arrow, said arrow having a configuration recognized by software to associate said at least one arrow with said at least one object; said arrow conveying a transaction relating to said at least one object.

10 2. The method for programming an electronic device of claim 1, wherein said arrow includes a tail end, and said configuration comprises said at least one object being disposed within a definable distance to said tail end.

15 3. The method for programming an electronic device of claim 2, further including a further object disposed within a definable distance to the head end of said arrow, said transaction being directed by said arrow to be carried out from said at least one object to said further object.

20 4. The method for programming an electronic device of claim 1, wherein said transaction is selectable from a set of definable transaction categories, each transaction category having associated with it a definable arrow appearance.

5. The method for programming an electronic device of claim 4, wherein said arrow appearance includes at least one of a plurality of color choices, each corresponding to at least one of said transaction categories.

5 6. The method for programming an electronic device of claim 4, wherein said arrow appearance includes at least one of a plurality of line styles, each corresponding to at least one of said transaction categories.

10 7. The method for programming an electronic device of claim 4, wherein said arrow appearance includes at least one combination of a plurality of color choices and a plurality of line styles, each combination corresponding to at least one of said transaction categories.

15 8. The method for programming an electronic device of claim 1, wherein said configuration includes a portion of said arrow circumscribing said at least one object.

20 9. The method for programming an electronic device of claim 8, including a further object disposed within a user definable distance to the head end of said arrow, said transaction being directed by said arrow to be carried out from said at least one object to said further object.

10. The method for programming an electronic device of claim 8, further including a plurality of said portions, each circumscribing at least one on-screen object, all of said circumscribed on-screen objects being associated with said arrow .

5

11. The method for programming an electronic device of claim 10, further including a further object disposed within a distance to the head end of said arrow, said transaction being directed by said arrow to be carried out from said plurality of circumscribed objects to said further object.

10

12. The method for programming an electronic device of claim 1, wherein said configuration includes at least one vertex formed in a portion of said at least one arrow, said at least one vertex being disposed within a user definable distance to said at least one object, whereby each vertex may select an on-screen object to be associated with said at least one arrow.

15

13. The method for programming an electronic device of claim 12, including a further object disposed within a user definable distance to the head end of said arrow, said transaction being directed by said arrow to be carried out from said at least one selected object to said further object.

20

14. The method for programming an electronic device of claim 1, wherein said at least one object comprises a previous arrow drawn from an on-screen

object, said at least one arrow extending to a portion of said previous arrow, a modifier command entered within a definable distance to said at least one arrow, said at least one arrow acting to apply said modifier command to the transaction conveyed by said previous arrow.

5

15. The method for programming an electronic device of claim 14, wherein said modifier command is entered as text adjacent to said at least one arrow.

16. The method for programming an electronic device of claim 1, wherein said at least one object includes a previous arrow drawn from an on-screen object, said at least one arrow having a front end extending to a portion of said previous arrow, and a tail end associated with another on-screen object, said at least one arrow acting to apply the function of said another on-screen object to the transaction conveyed by said previous arrow.

15

17. The method for programming an electronic device of claim 1, wherein said at least one arrow includes a double-headed arrow having a first end associated with said at least one on-screen object, and having an opposed, second end associated with a further on-screen object, said double-headed arrow conveying a swap transaction between said at least one on-screen object and said further on-screen object.

20

18. The method for programming an electronic device of claim 1, wherein said transaction comprises copying said at least one object to an on-screen location adjacent to the front end of said at least one arrow.

5 19. The method for programming an electronic device of claim 1, wherein said transaction comprises placing said at least one object inside a further on-screen object disposed within a user definable distance to the front end of said at least one arrow.

10 20. The method for programming an electronic device of claim 1, wherein said transaction comprises directing an electronic signal from said at least one object to a further on-screen object disposed within a user definable distance to the front end of said at least one arrow.

15 21. The method for programming an electronic device of claim 1, wherein said transaction comprises directing a plurality of electronic signals from said at least one object to a further on-screen object disposed within a user definable distance to the front end of said at least one arrow, said transaction including summing said plurality of signals before entering said further on-screen object.

20

22. The method for programming an electronic device of claim 1, wherein said transaction comprises changing said at least one object to equal at least one

attribute of a further on-screen object disposed within a user definable distance to the front end of said at least one arrow.

23. The method for programming an electronic device of claim 1, wherein
5 said at least one arrow is adapted to change its aesthetic properties after being drawn and recognized, and further including the step of touching said arrow with said input device to implement said transaction.

24. The method for programming an electronic device of claim 23, further
10 including the step of entering a Show Arrow command to make visible at least one arrow previously drawn and disappeared.

25. The method for programming an electronic device of claim 24, wherein
15 said Show Arrow command comprises a hand drawn symbol recognized by the software as a Show Arrow command.

26. The method for programming an electronic device of claim 1, wherein
said at least one object includes a variable controller, and said transaction
includes specifying the direction of movement of said controller to increase and
20 decrease said variable.

27. The method for programming an electronic device of claim 1, wherein
said at least one object comprises a sound file, and said at least one arrow includes

an arrow drawn from a variable controller to said sound file, said transaction applying the control function of said variable controller to said sound file.

28. The method for programming an electronic device of claim 27, wherein
5 said sound file includes a stereo audio signal having right and left channels, and said at least one arrow includes a pair of arrows drawn from a pair of variable controllers to respective right and left sides of said sound file object to apply said controllers to control said right and left channels, respectively.

10 29. The method for programming an electronic device of claim 1, wherein said transaction includes redirecting a signal path among a plurality of on-screen objects.

15 30. The method for programming an electronic device of claim 1, wherein said at least one arrow is adapted to flicker after being drawn, and further including the step of touching said flickering arrow with said input device to implement said transaction and cause said at least one arrow to disappear.

20 31. The method for programming an electronic device of claim 1, wherein said at least one object associated with said arrow is adapted to change the aesthetic properties of said object after said arrow is drawn, and further including the step of touching said object with said input device to implement said transaction.

32. The method for programming an electronic device of claim 1, wherein
said at least one arrow is adapted to change its aesthetic properties after being
drawn, and further including the step of touching said changed arrow with said
5 input device to implement said transaction and cause said at least one arrow to
reassume its original aesthetic properties.

09880397-051201